



**Lakeview
Rock
Products, Inc.**

P.O. Box 540700
900 North Redwood Road
North Salt Lake, Utah 84054-0700
(801) 292-7161

M/035/0020
cc: Leslie
Task 3770

September 30, 2010

Mr. Paul B. Baker
Minerals Program Manager
Department of Natural Resources
State of Utah
Division of Oil Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

**Subject: 2009 Slope Stability Analysis - Lakeview Rock Products Inc., Beck
Street Quarry, M0350020, Salt Lake & Davis Counties, Utah**

Dear Mr. Baker:

Attached please find our responses to questions outlined in your letter dated July 26, 2010. Also attached are comments from GeoStrata regarding the same letter as well as revised plates, in duplicate, as requested.

Please feel free to contact me with any questions or comments.

Sincerely,
Lakeview Rock Products, Inc.

John Burggraf
Vice-President

cc: Scott G. Hughes – Vice President, LRP
Kevin Watkins – General Counsel, LRP

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SEP 30 2010

DIV. OF OIL, GAS & MINING

Answers and Responses to DOGM's Ninth Review of the Approved
Notice of Intention to Commence Large Mining Operations
Lakeview Rock Products, Inc.
Beck Street Quarry
M/035/0020
Comments Dated July, 26, 2010

Lakeview's responses to the Division's comments are set forth below. Please note that Lakeview's Reclamation Plan has already been approved by the Division, and our responses are provided in accordance with this approval and with Administrative Code Rules ("Rules") that apply to Large Mining Operations.

Lakeview also requests that any further comments to its approved Reclamation Plan include references to the Rules as contemplated by the provisions of R647-4-102 of the Rules.

General Comments:

- 1 *Submittal should be formatted to easily incorporate revisions and amendments.*
OK
- 2 *This review only addresses the slope stability report submitted March 25, 2010. Additional comments from the Division can be generated in the future based on submittals received in the future. The slope stability report is part of the NOI, as required by the request for variance; hence the slope stability reports need to reflect the commitments in the NOI by the operator and the operator's consultant. Please be advised that the slope stability report is part of the NOI required by Section 6.4.1 of the APPROVED NOI dated May 12, 2008.*
- 3 *In Sections of the NOI that involve slope stability (106.2, 109.4 and 111), please commit in the text that the slope stability will be regularly monitored on an ongoing basis (site schedule) and that a minimum Factor of Safety (site FOS the operator will commit to) will be maintained. Include dynamic FOS. Commit that additional geotechnical evaluations will be done if the hydrology, geology, or the structural regimes change as new working faces are excavated or as warranted. Lakeview Rock Products commits to the provisions in the approved NOI dated May 12, 2008 with regards to Slope Stability and FOS.*
- 4 *Quaternary sediments are not to be overlooked, even if the site visit did not include that area. The slope stability report needs to address all areas of the permit that are either excavated or filled. The Quaternary sediments' slope angle is to reflect the geotechnical properties of the unit that will provide the operator an adequate FOS.*

See comments in GeoStrata response dated September 29, 2010. (attached)

- 5 *Commit that additional geotechnical evaluations will be done if groundwater is encountered as new working faces are excavated or as warranted.*
Lakeview Rock Products commits to the provisions in the approved NOI dated May 12, 2008 with regards to geotechnical evaluations.
- 6 *Report is incomplete. As written "...adequate Factors of Safety..." The report needs to note a minimum Factor of Safety that will be maintained. Commit that additional geotechnical evaluations will be done if either the geology or the structural regimes change as new working faces are excavated or as warranted. The report needs to define the maximum angle for the Quaternary sediments.*
The report is in fact complete. The requirement of 6.4.1 of the approved NOI dated May 12, 2008 is for Lakeview to perform additional engineering review which was done and validates the engineering completed and approved in the approved NOI. The Factor of Safety is prescribed in the NOI and the Slope Stability report is simply stating engineering facts and calculations. Lakeview Rock Products commits to the provisions in the approved NOI dated May 12, 2008 with regards to geotechnical evaluations. See additional comments in GeoStrata response dated September 29, 2010. (attached)
- 7 *As noted above (comment 3) the operator is to commit in the text that slope stability will be regularly monitored on an ongoing basis (site schedule and vibration limits) and that a minimum FOS will be maintained. Commit that additional geotechnical evaluations will be done if either the geology or the structural regimes change as new working faces are excavated or as warranted.*
Lakeview Rock Products commits to the provisions in the approved NOI dated May 12, 2008 with regards to geotechnical evaluations.
- 8 *Stereonet plot needs to indicate the excavation orientation plot in relation to the fractures and bedding planes. Label the lithologic units.*
See comments in GeoStrata response dated September 29, 2010. (attached)
- 9 *Include the geotechnical model parameters of each lithologic unit as was done on plate B-1 and B-2 (this was comment 6 of the 8th review).*
See comments in GeoStrata response dated September 29, 2010. (attached)
- 10 *Slope stability report needs to include a geologic map, site vicinity map, and the slope stability cross sections map.*
The geologic map and site vicinity map are exhibits in the approved NOI dated May 12, 2008. See additional comments in GeoStrata response dated September 29, 2010. (attached)

11 *As written "...the height of the limestone will decrease..." The mine will need to provide x sections that will reflect changing the changing slope angle over time. It is unclear how the operator will comply with the geotechnical recommendations with top down construction techniques when the recommended cut angle of the bottom lithologic unit will decrease in height as excavation continues. Cross sections are to show the projected dip, the final pit slope excavation line, with bench configuration. (This was comment 9 of the 8th review).* This question was answered in our response to comment 9 of the 8th review. The final pit plan cross sections are shown in Figure 4 of the approved NOI dated May 12, 2008.

12 *The result of the stability report will impact the requested variance.* There is no variance request pending.

13 *The results of the stability report will impact surety required.* In comment 27 of the 7th review Lakeview stated the following "Attached please find our letter dated July 30, 2008 wherein we requested formal release of bond # 103930589. To date this request has not been addressed and we ask again that this bond be released" To date this bond has not been released and Lakeview hereby requests again that the Division address this issue.

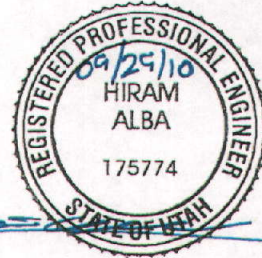
MEMORANDUM

To: Lakeview Rock Products
c/o Mr. John Burggraf

From: GeoStrata, LLC
Hiram Alba, PE

Date: September 29, 2010

Subject: DOGM Comments to Geotechnical Report, dated July 26, 2010



DOGM provided comments to our original geotechnical report dated November 30, 2009. This memo provides a response to those presented in DOGM's review.

Comment #4: Quaternary sediments are not to be overlooked even if the site visit did not include that area. The slope stability report needs to address all areas of the permit that are either excavated or filled. The Quaternary sediments' slope angle is to reflect the geotechnical properties of the unit that will provide the operator an adequate FOS.

All of the Quaternary sediments noted during our site visit lie on existing natural slopes. No Quaternary deposits were noted in either of the active working faces. These deposits exist at there current angle of repose and were not assessed as a part of our work. The deposits are relatively shallow and will likely rarely exist in the working mine areas.

Comment #6: Report is incomplete, As written "...adquate Factors of Safety..." The report needs to note a minimum Factor of Safety that will be maintained.

Factors of Safety are provided both in the text of the report and in the slope stability plates.

Comment #8: Stereonet plot needs to indicate the excavation orientation plot in relation to the fractures and bedding planes. Label the lithologic units.

The plate has been modified as requested and is attached to this memo. Stereonets are representations of planes including joints, cut faces etc., they do not represent geologic units.

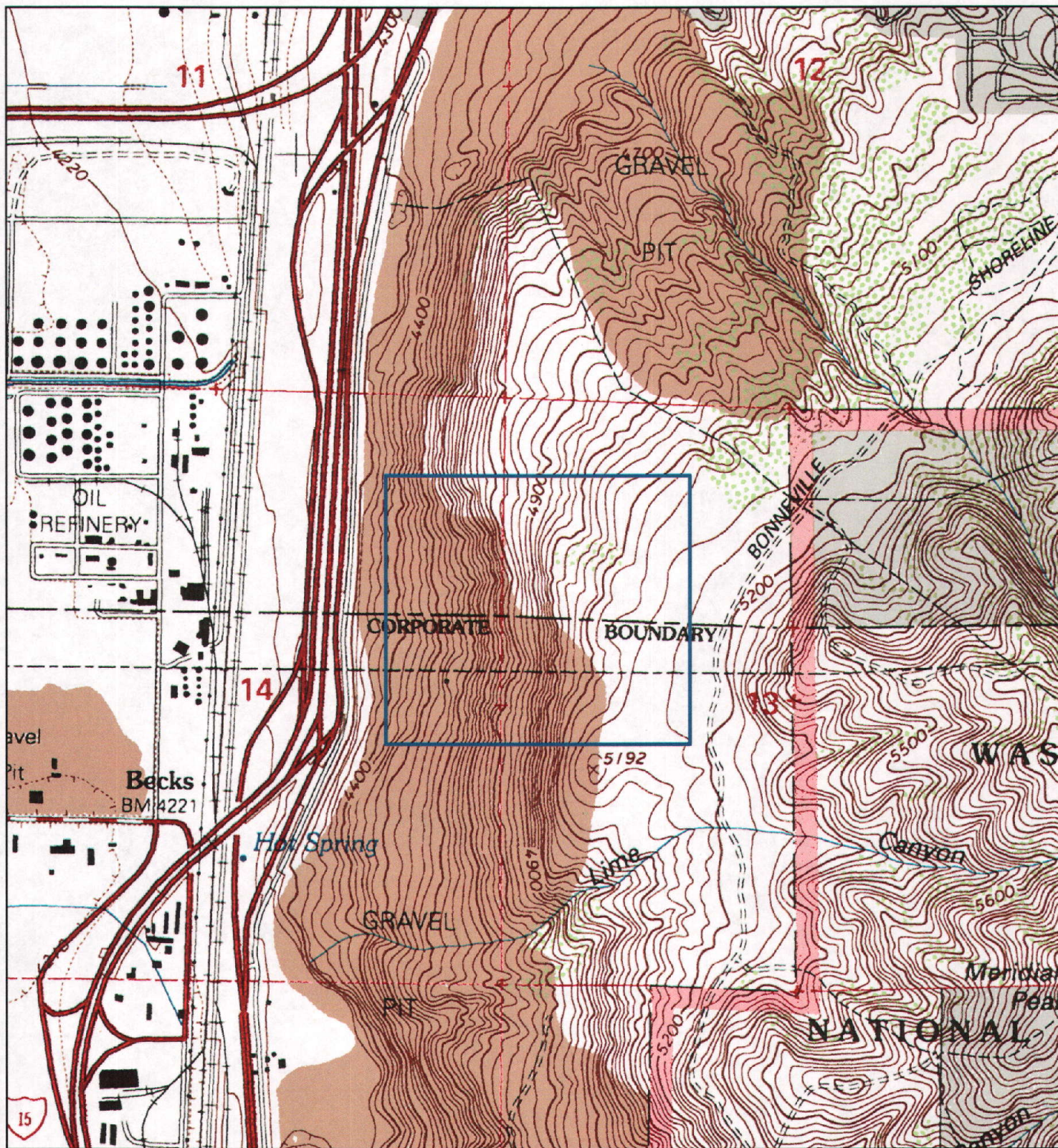
Comment #9: Include the geotechnical model parameters of each lithologic unit as was done on plate B-1 and B-2.

The geologic model parameters are presented in Plates B-1 and B-2 for reference. The parameters do not change from model to model. Placing these parameters on each of the slope stability plates would be redundant, time consuming and costly.

Comment #10: Slope stability report needs to include a geologic map, site vicinity map and the slope

stability cross sections map.

All of this information is included in the A appendix. The plates should have been a part of the original report. We have included them with this memo.



BASE MAP:
USGS Topographic Map

0 500 1,000 2,000 3,000 4,000 Feet

Legend

Approx. Site Boundary

1:14,000

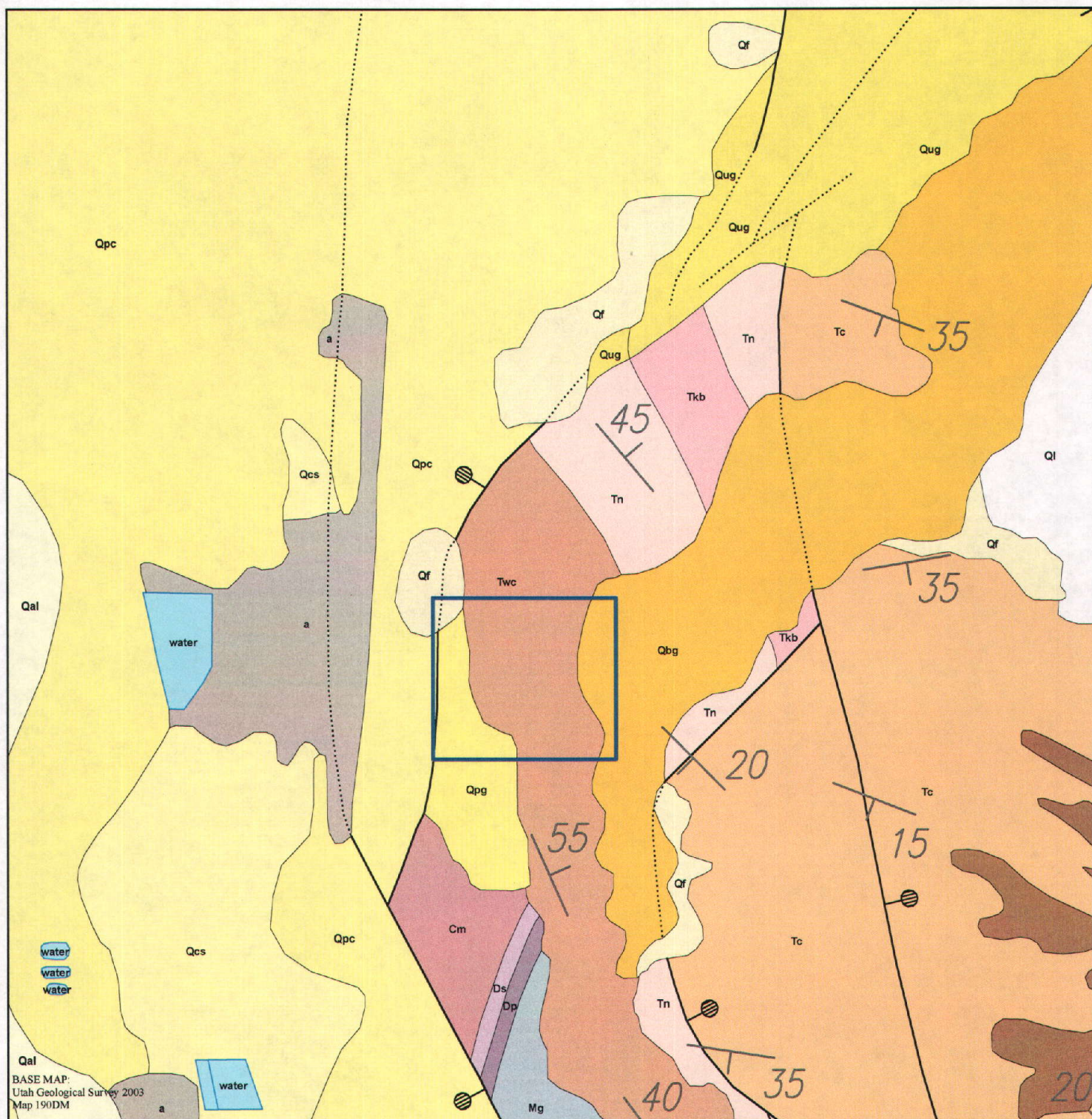


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Lakeview Rock Products
North Salt Lake, Utah
Project Number 609-001

Site Vicinity Map

Plate
A-1



Legend

Approx. Site Boundary
Approx. Site Boundary

Symbols

fault
strike and dip

Lines

Contact, well located
Fault, well located
Fault, concealed

Geology

Cm - Maxfield Limestone
Dp - Pinyon Peak Limestone
Ds - Stansbury Formation
Mg - Gardison Limestone
Qal - Alluvium

Qbg - Sand and gravel, high stand of Lake Bonneville
Qcs - Clay, silt, and sand
Qf - Alluvial-fan and debris-fan deposits
Ql - Landslide deposits
Qpc - Silt and clay, reg. phase of Lake Bonneville
Qpg - Sand and gravel, reg. phase of Lake Bonneville
Qug - Sand and gravel, high stand & reg. phase of Lake Bonneville, undivided
Tc - Conglomerate
Th - Hopper Canyon Formation
Tkb - Lahar, breccia, and tuff of Keetley Volcanics
Tn - Norwood Tuff
Twc - Conglomerate, Wasatch Formation
a - Artificial Fill
Water

1:24,001

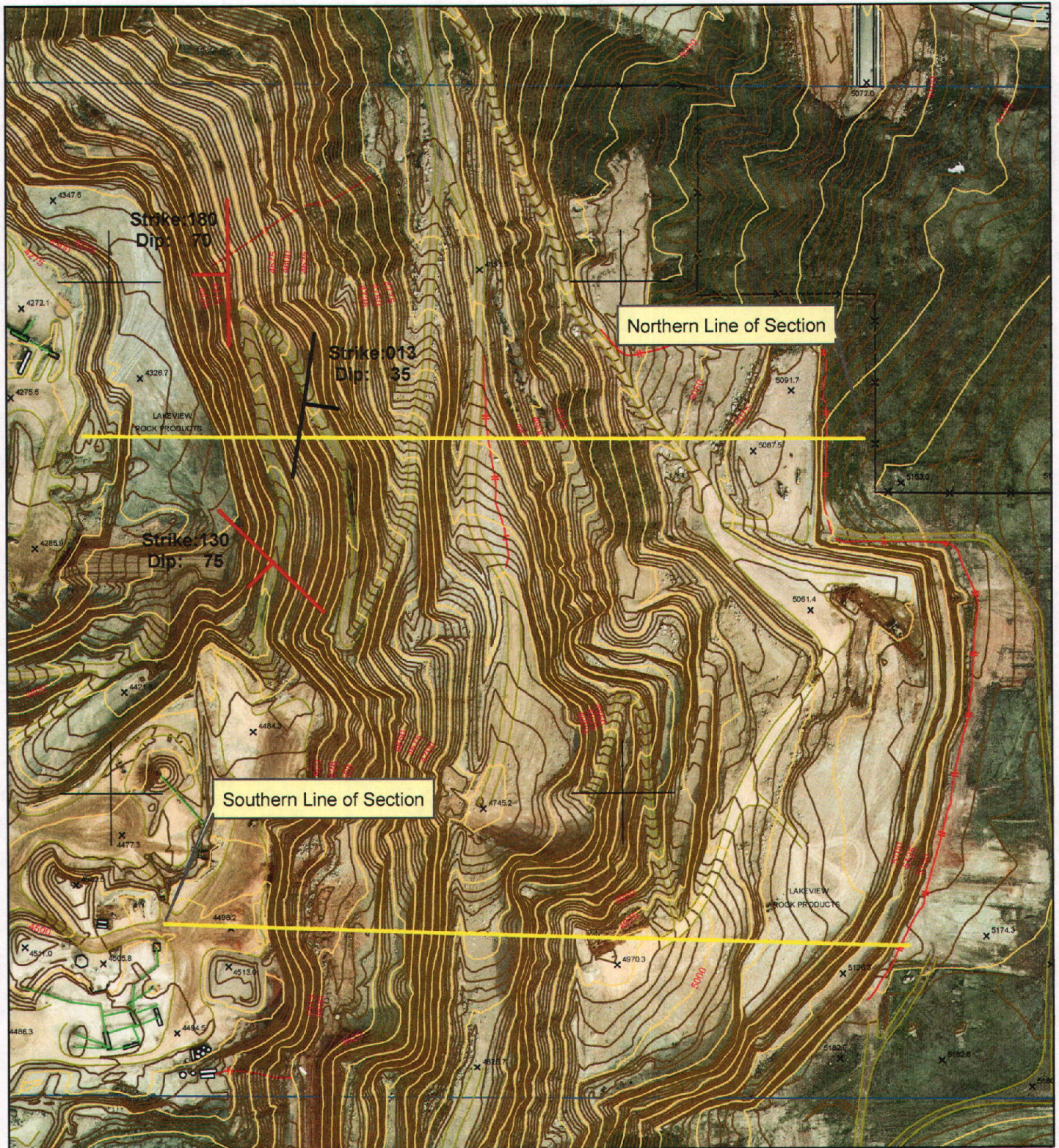


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Geologic Map

Plate
A-2



BASE MAP:
Client Provided Aerial Photography
and Topography



Legend

- Approx. Site Boundary
- Cross Section

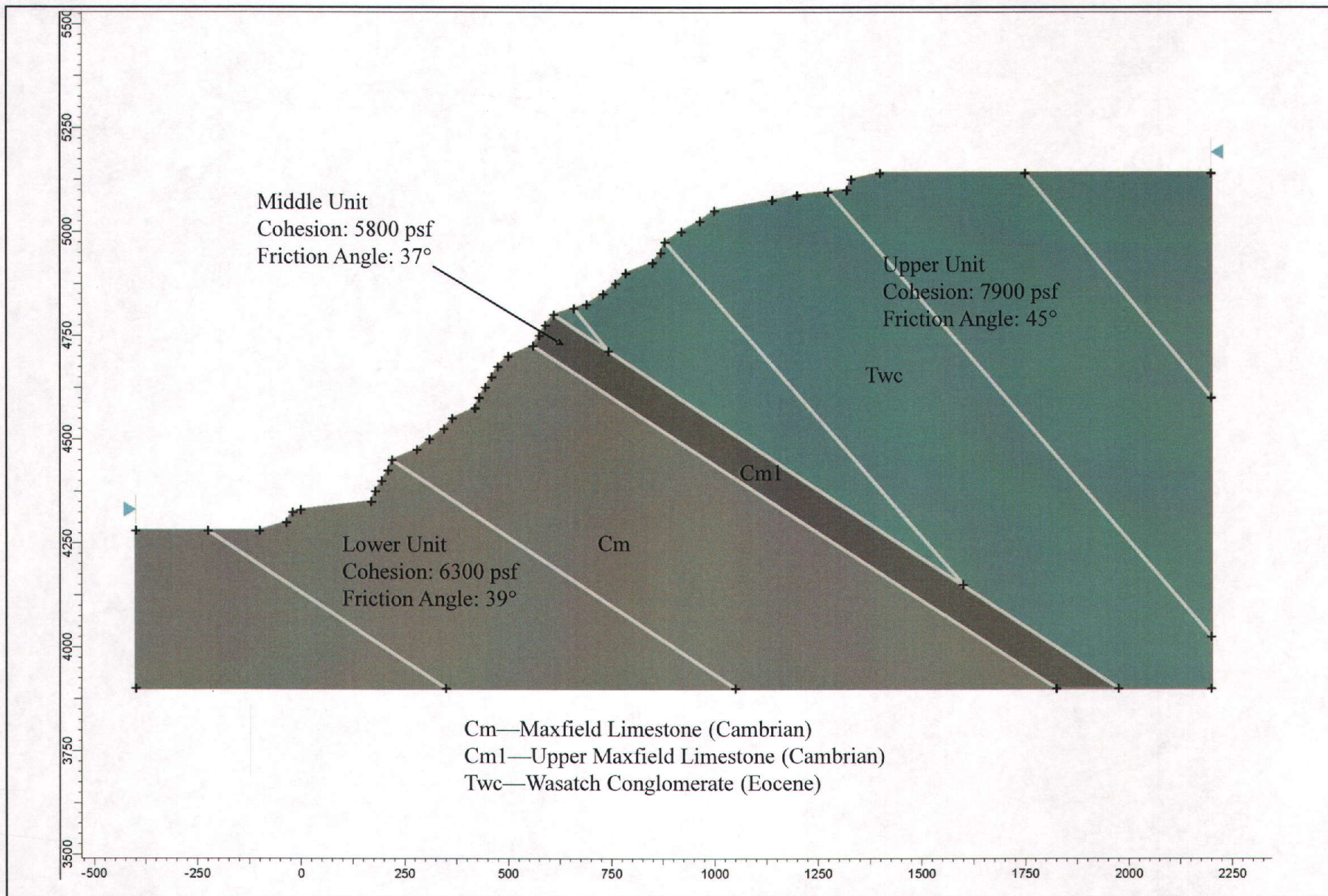


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**Slope Stability Cross
Sections Map**

**Plate
A-3**



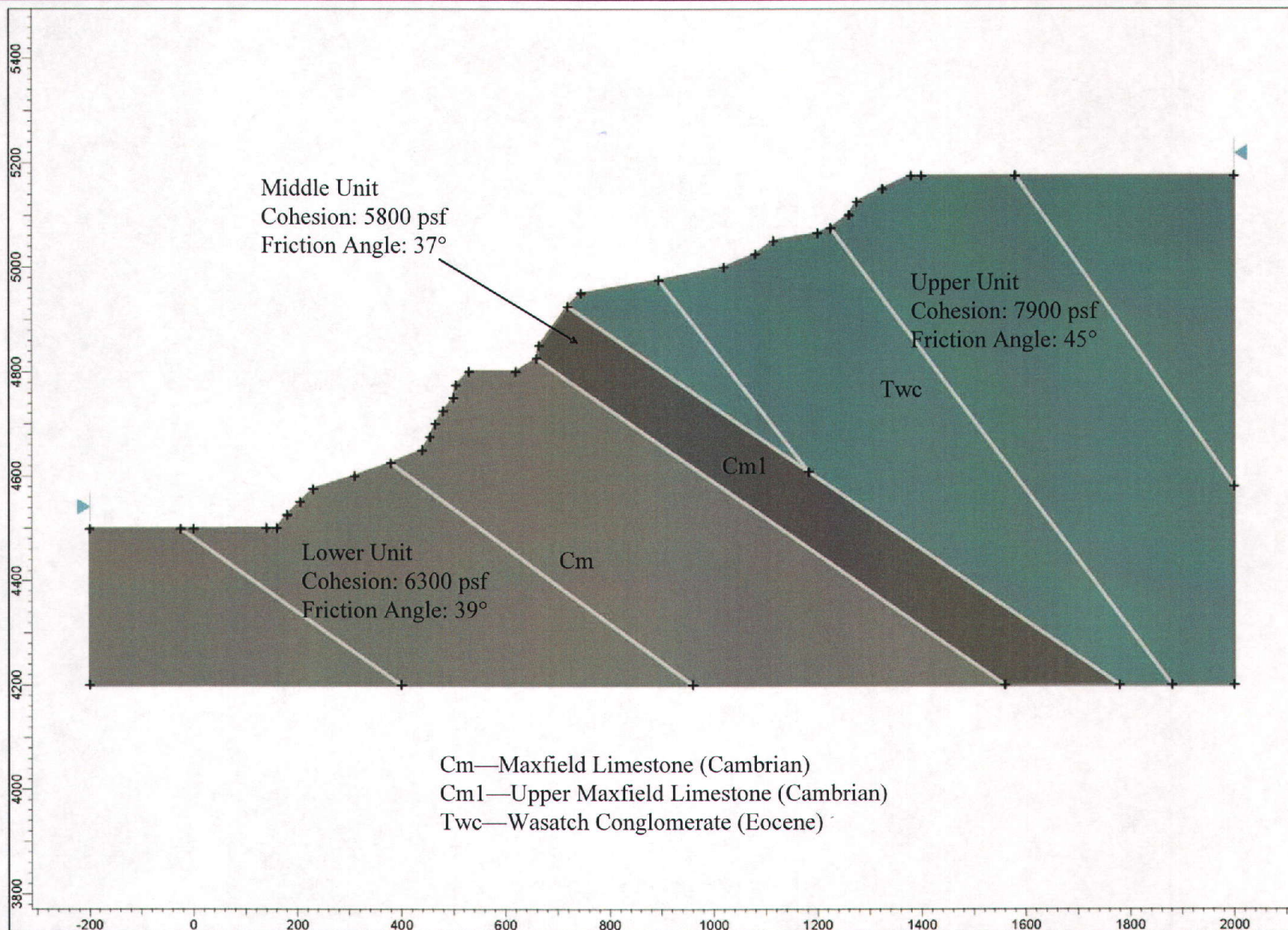
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NORTH CROSS SECTION

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**Plate
B-1**



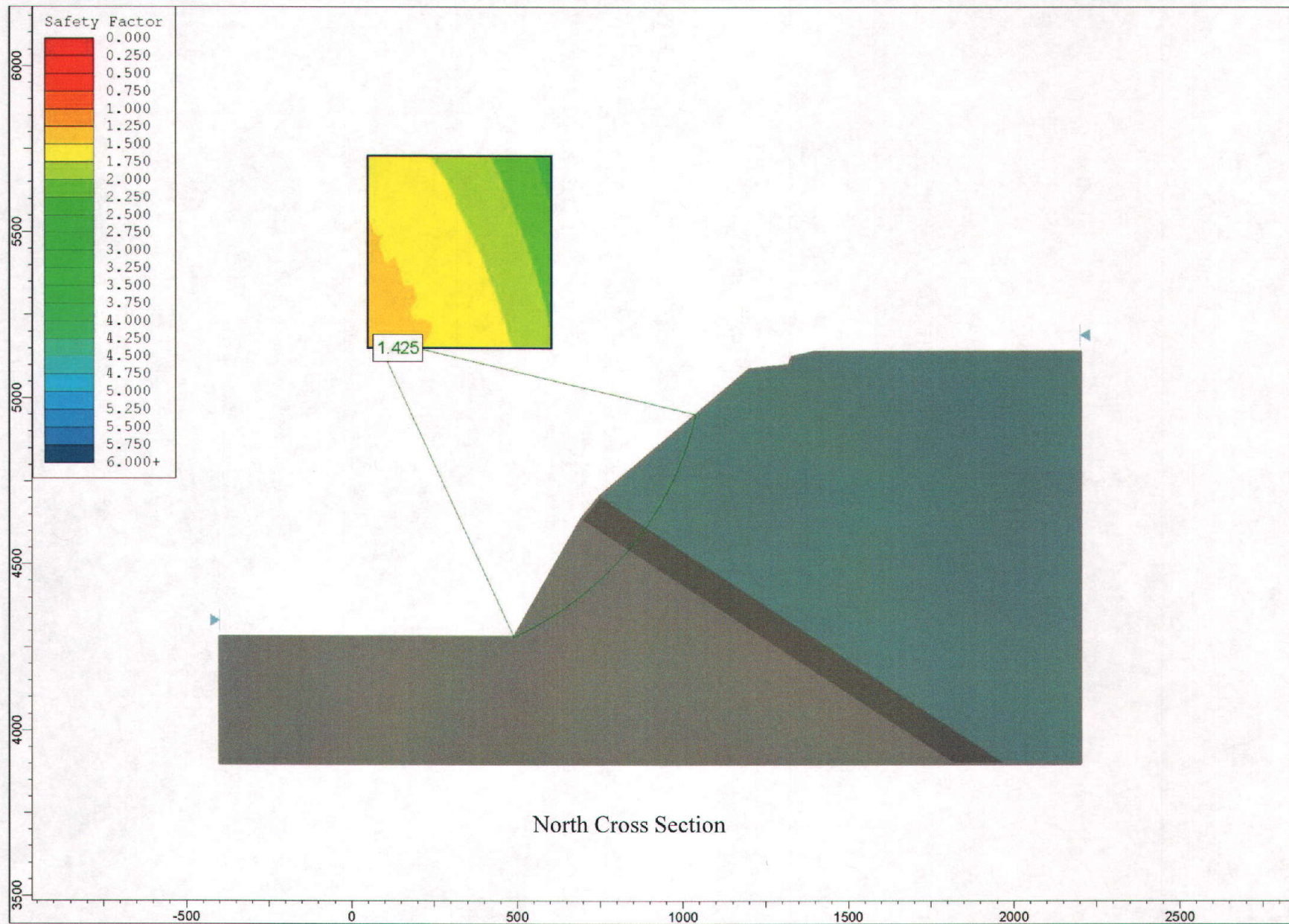
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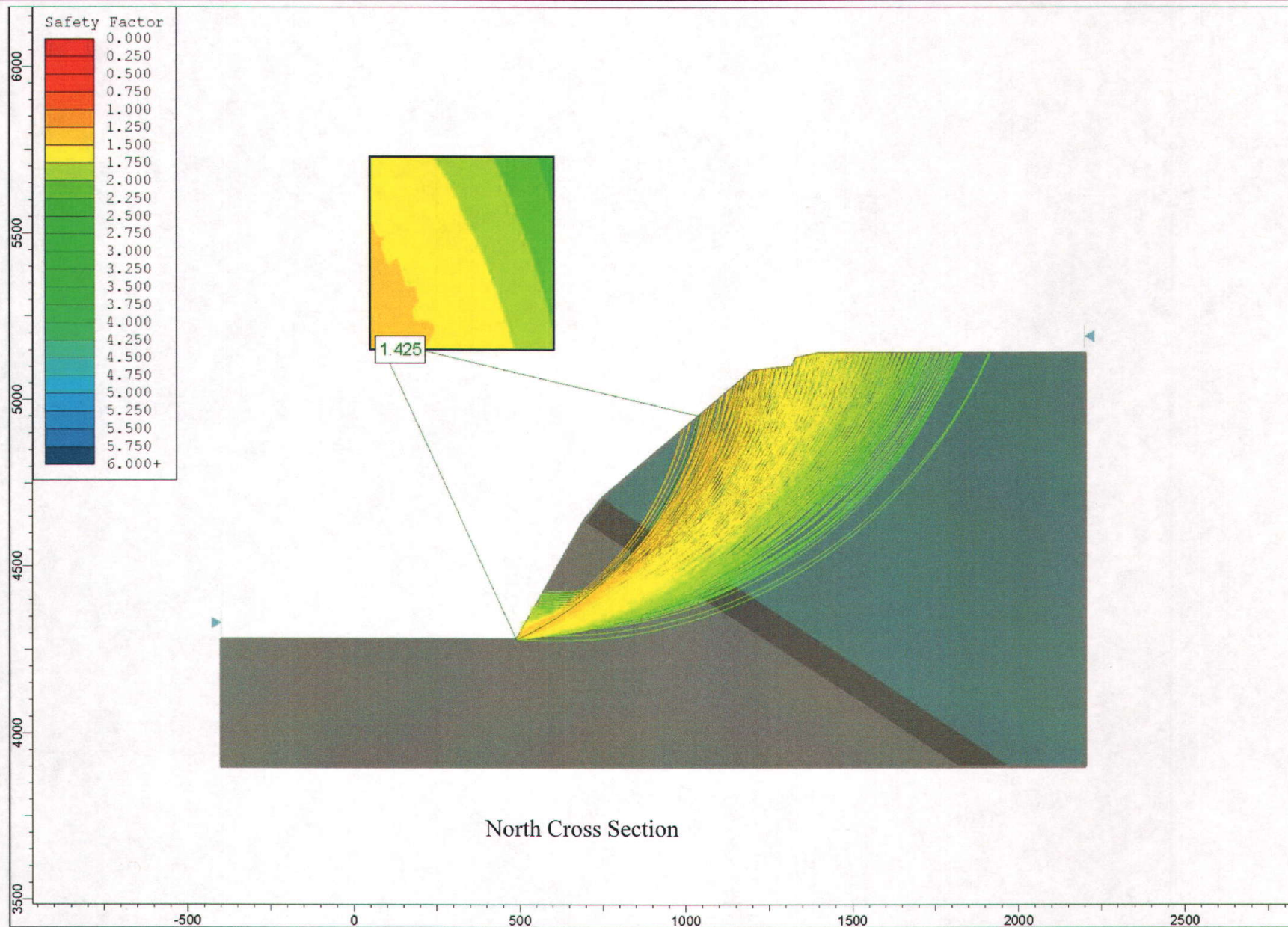
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SOUTH CROSS SECTION

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 Lakeview Rock Products
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Plate
B-2





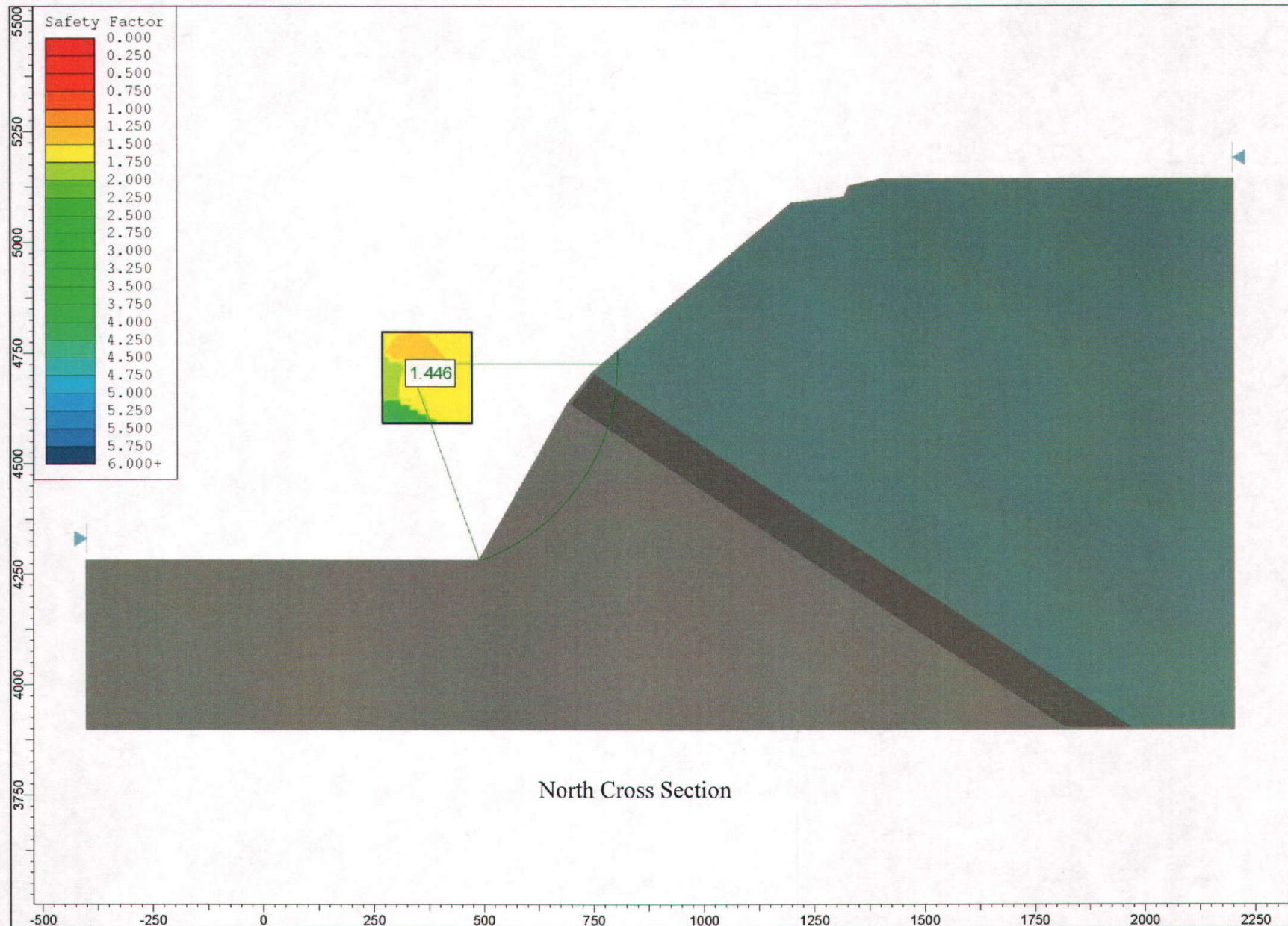
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GLOBAL SURFACES

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**Plate
B-4**



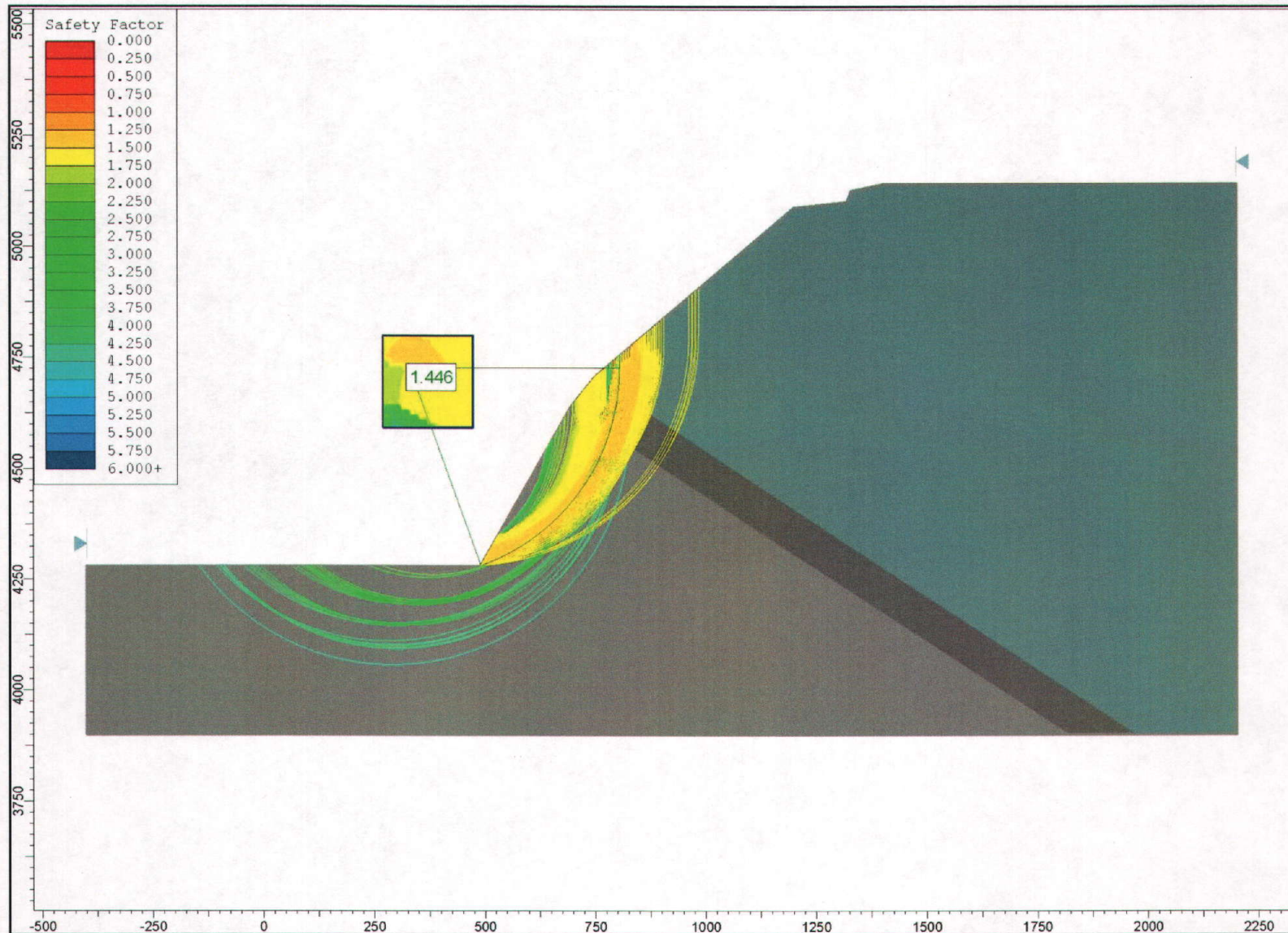
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BOTTOM MINIMUM

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**Plate
B-5**



North Cross Section

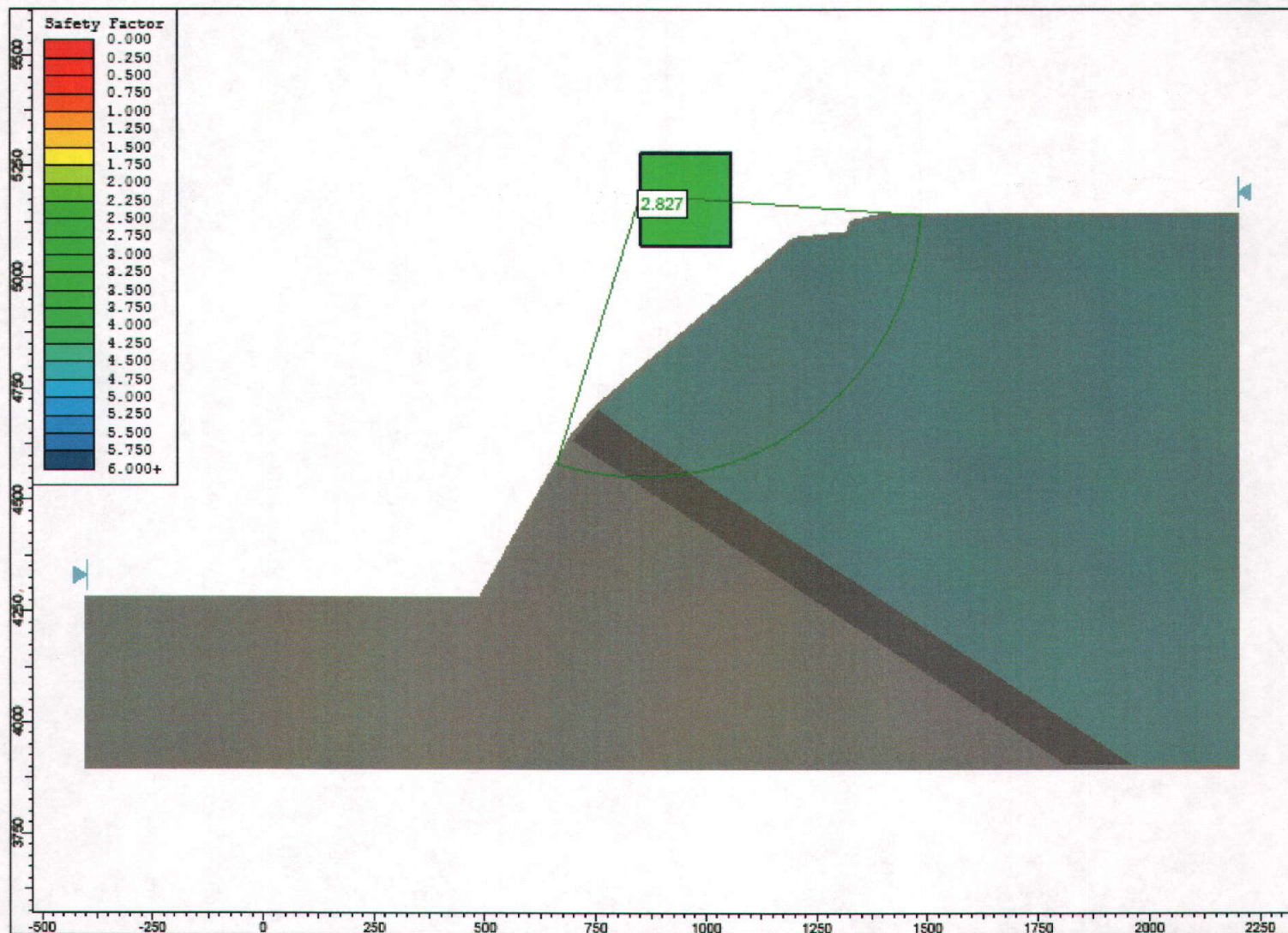
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Bottom Surface

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**Plate
B-6**



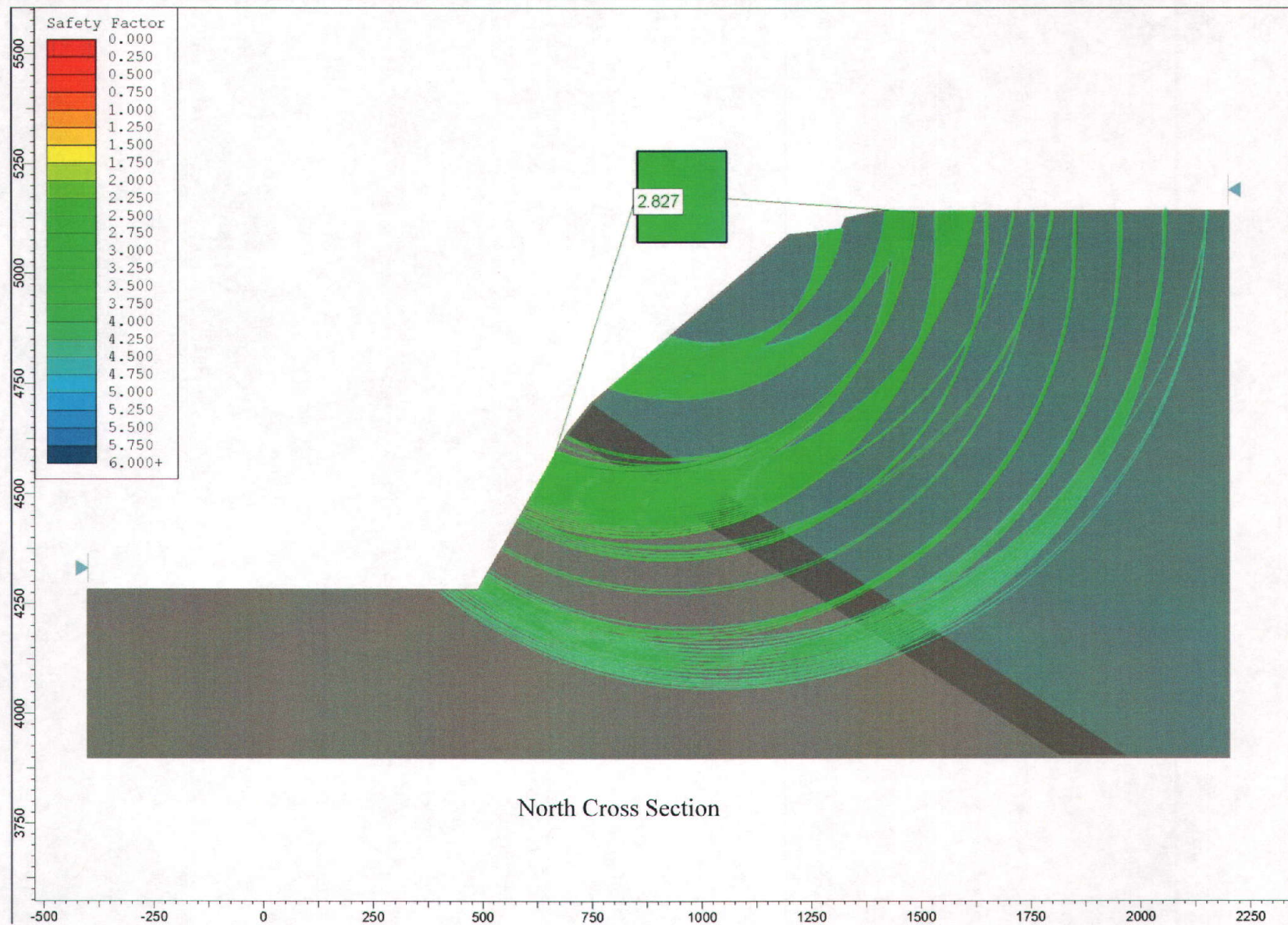
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Upper Minimum

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**Plate
B-7**



North Cross Section

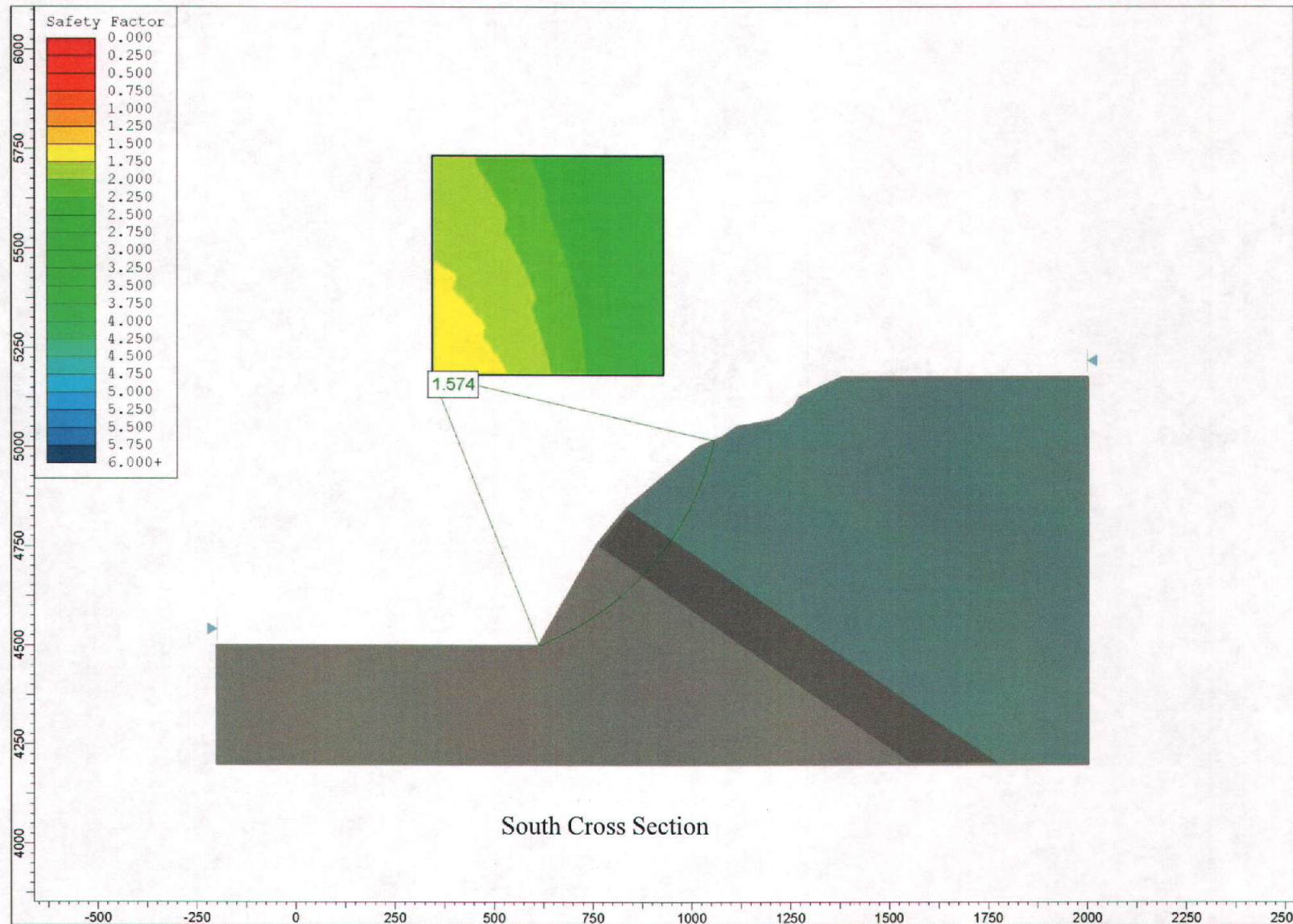
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**Plate
B-8**



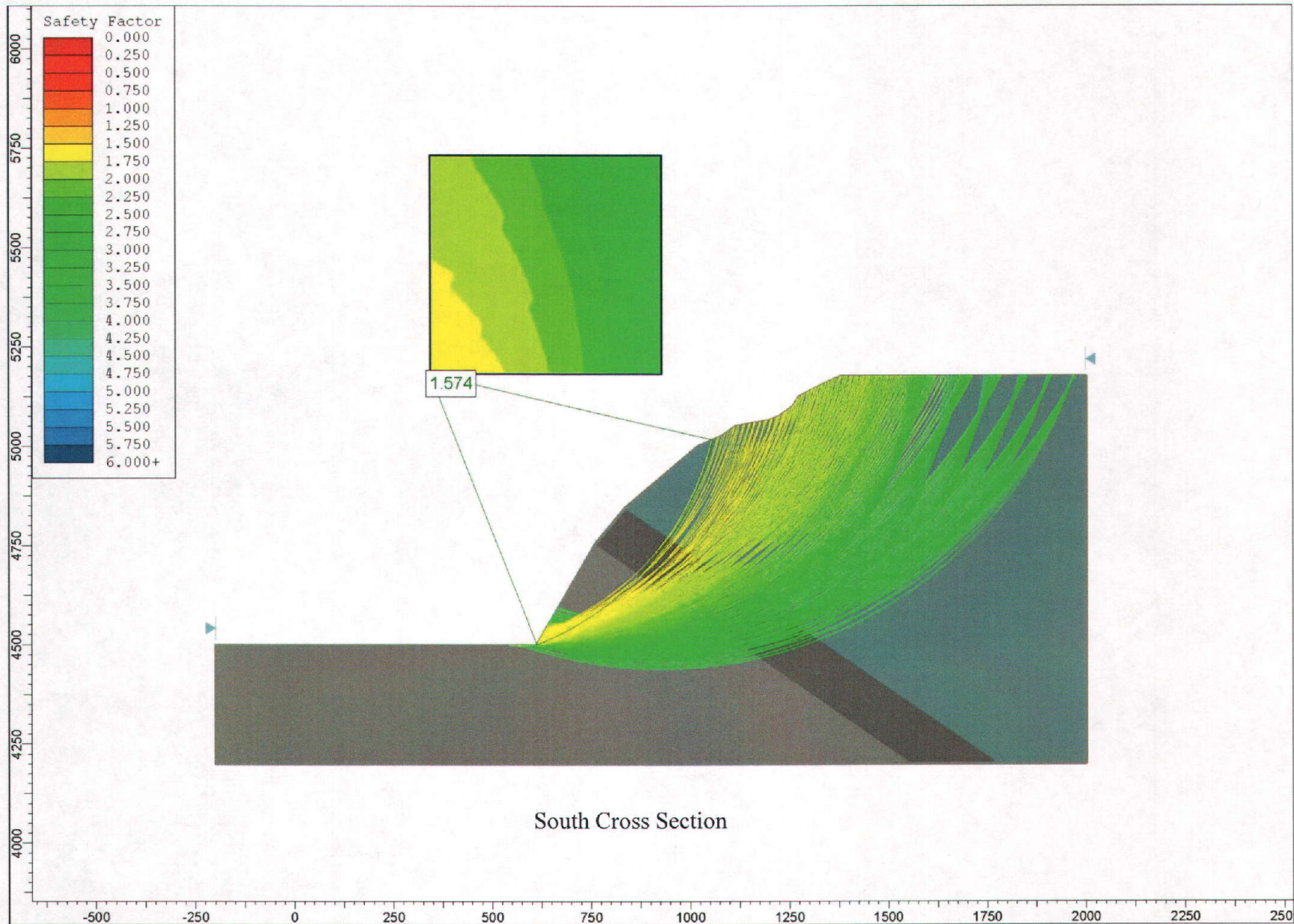
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**Plate
B-9**



South Cross Section

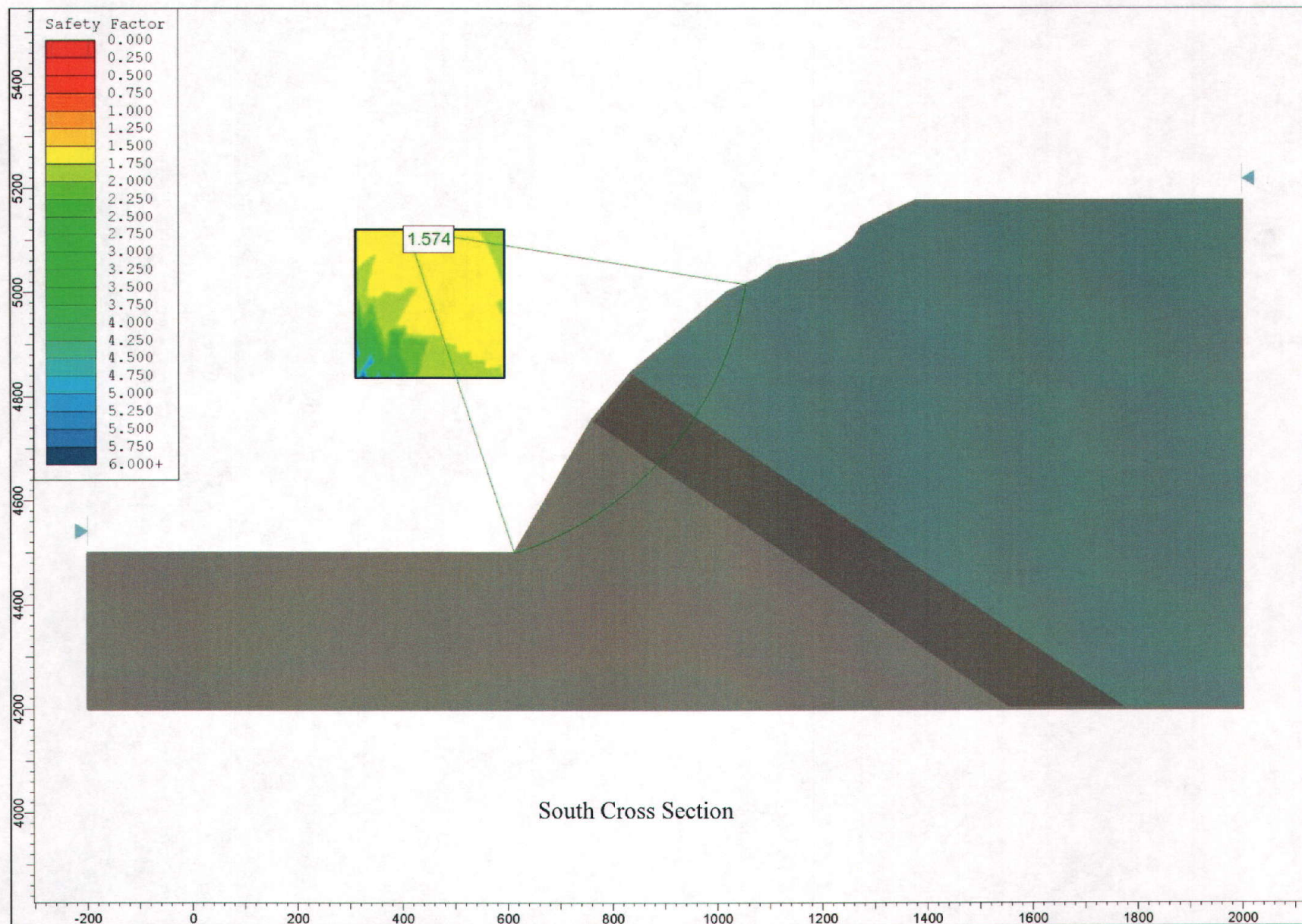
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**Plate
B-10**



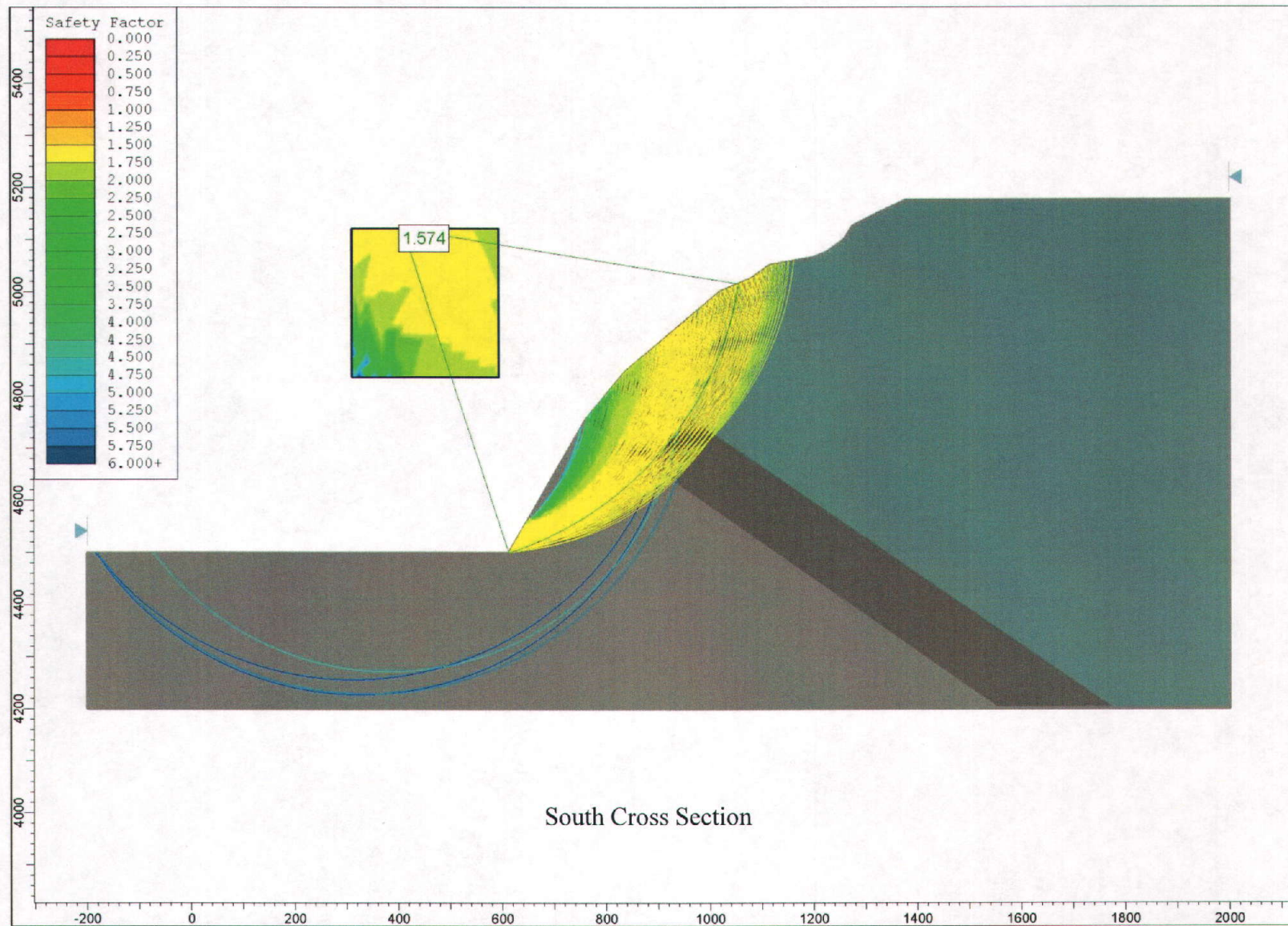
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**Plate
B-11**



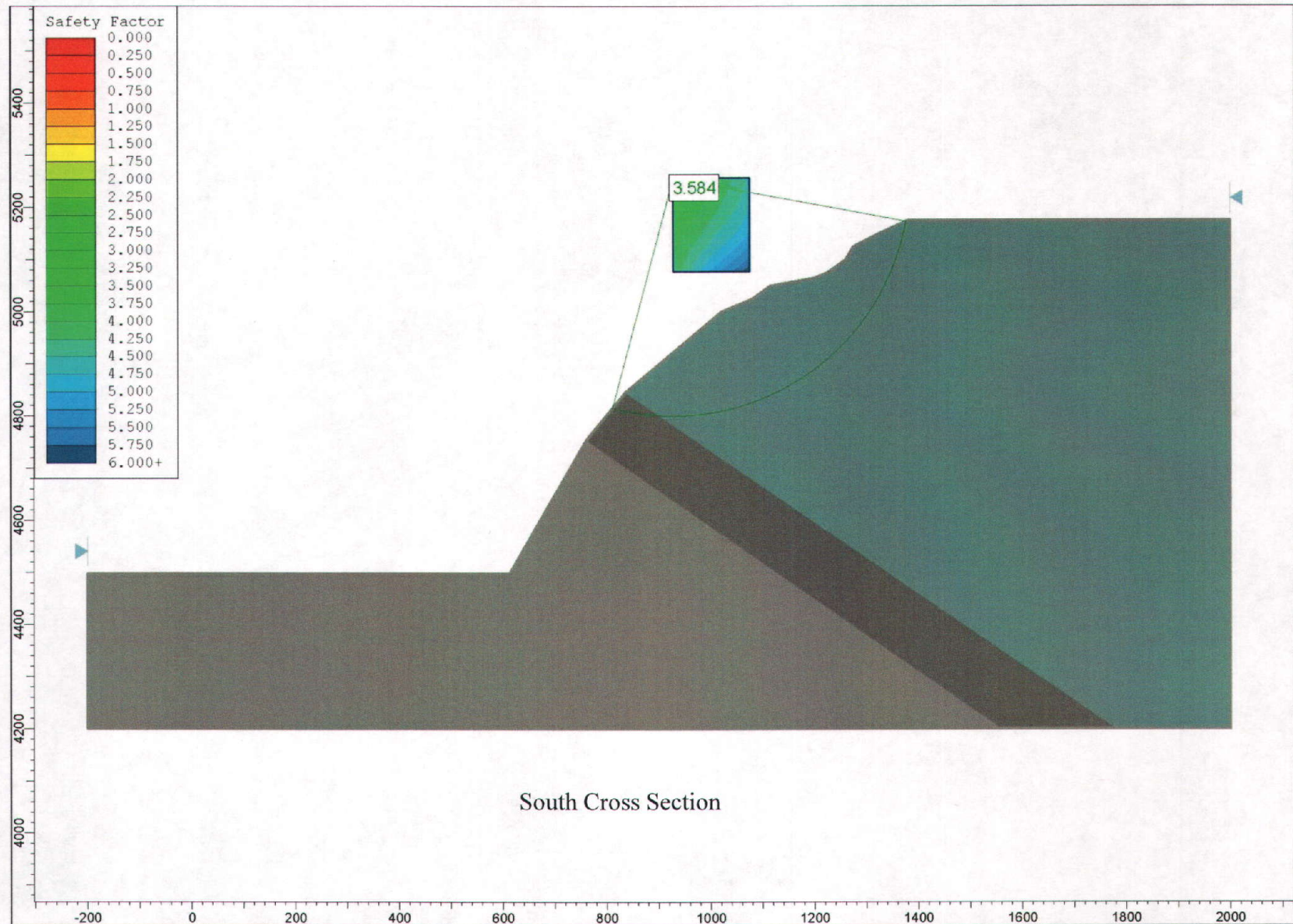
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**Plate
B-12**



South Cross Section

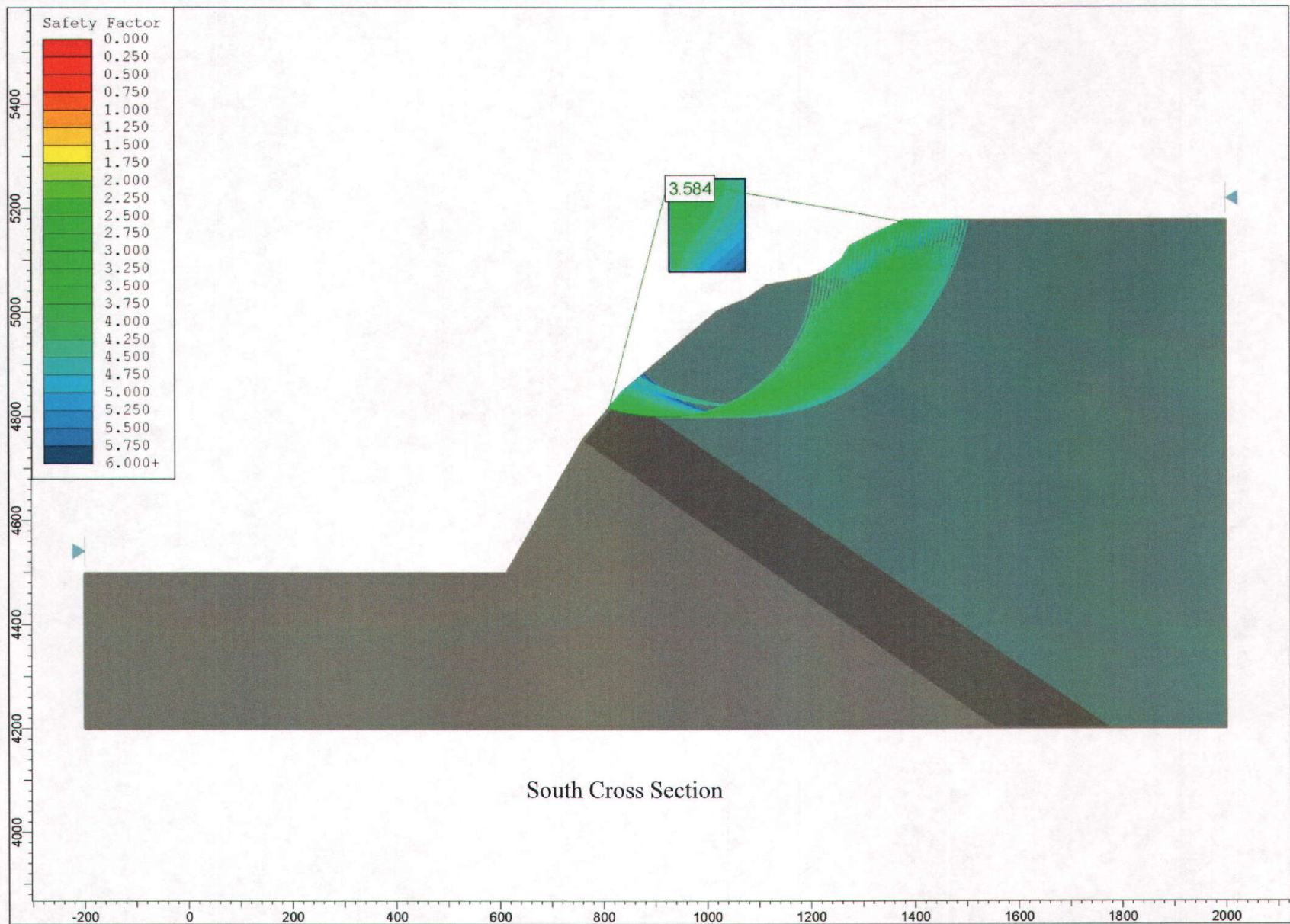
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**Plate
B-13**



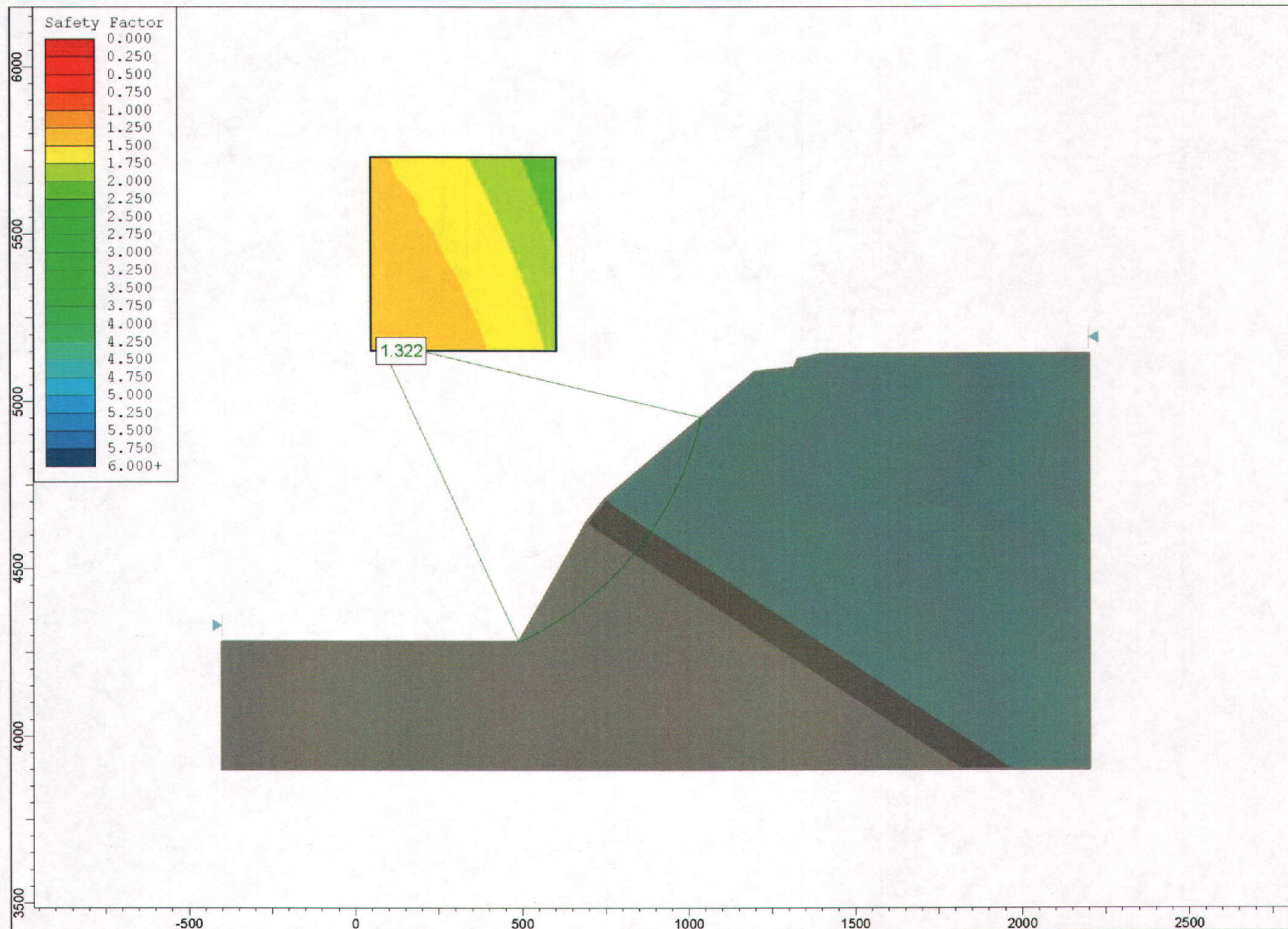
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Upper Surface

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**Plate
B-14**



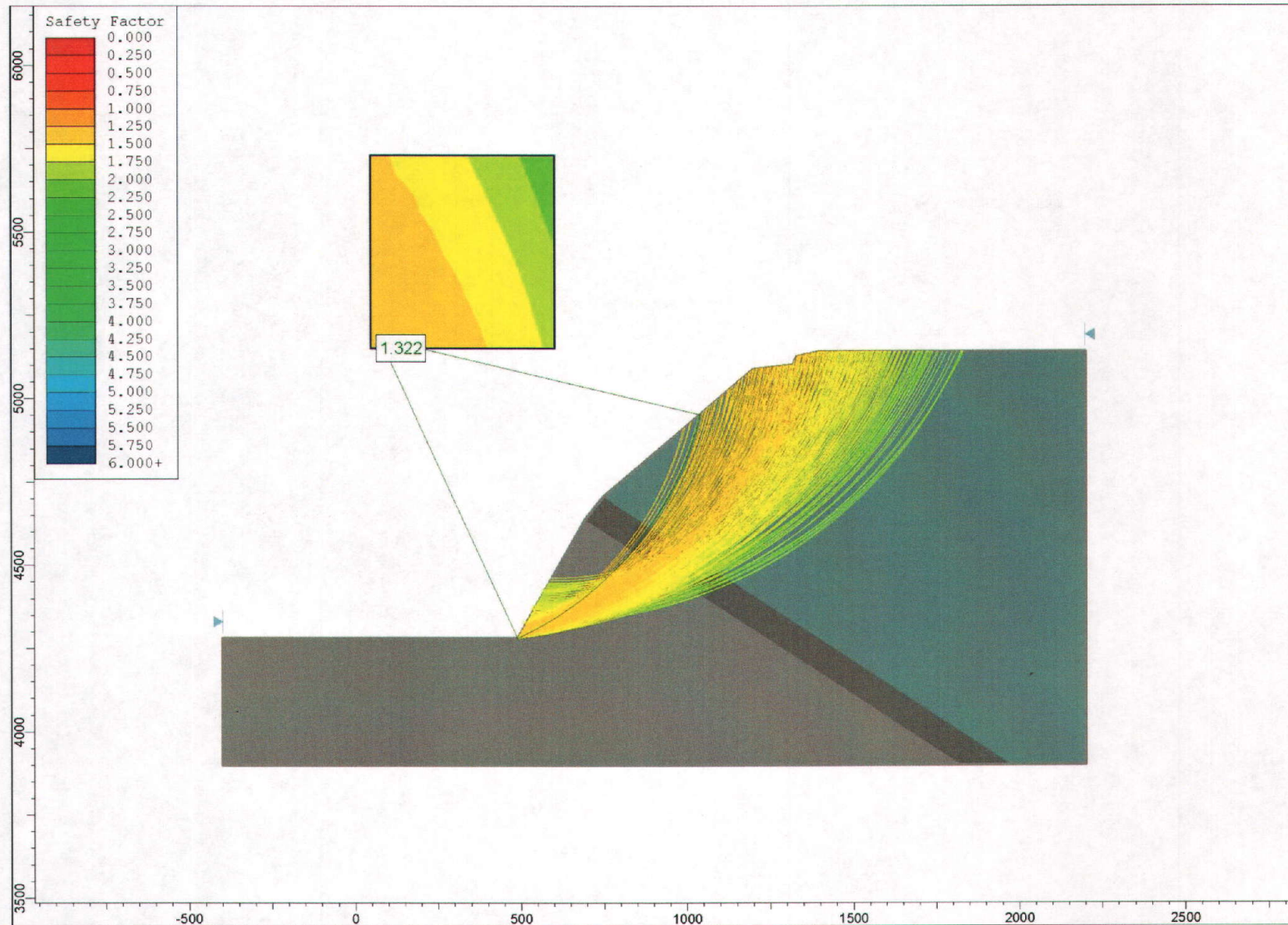
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Weak Siltstone Minimum

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Project Number 609-001

**Plate
B-15**



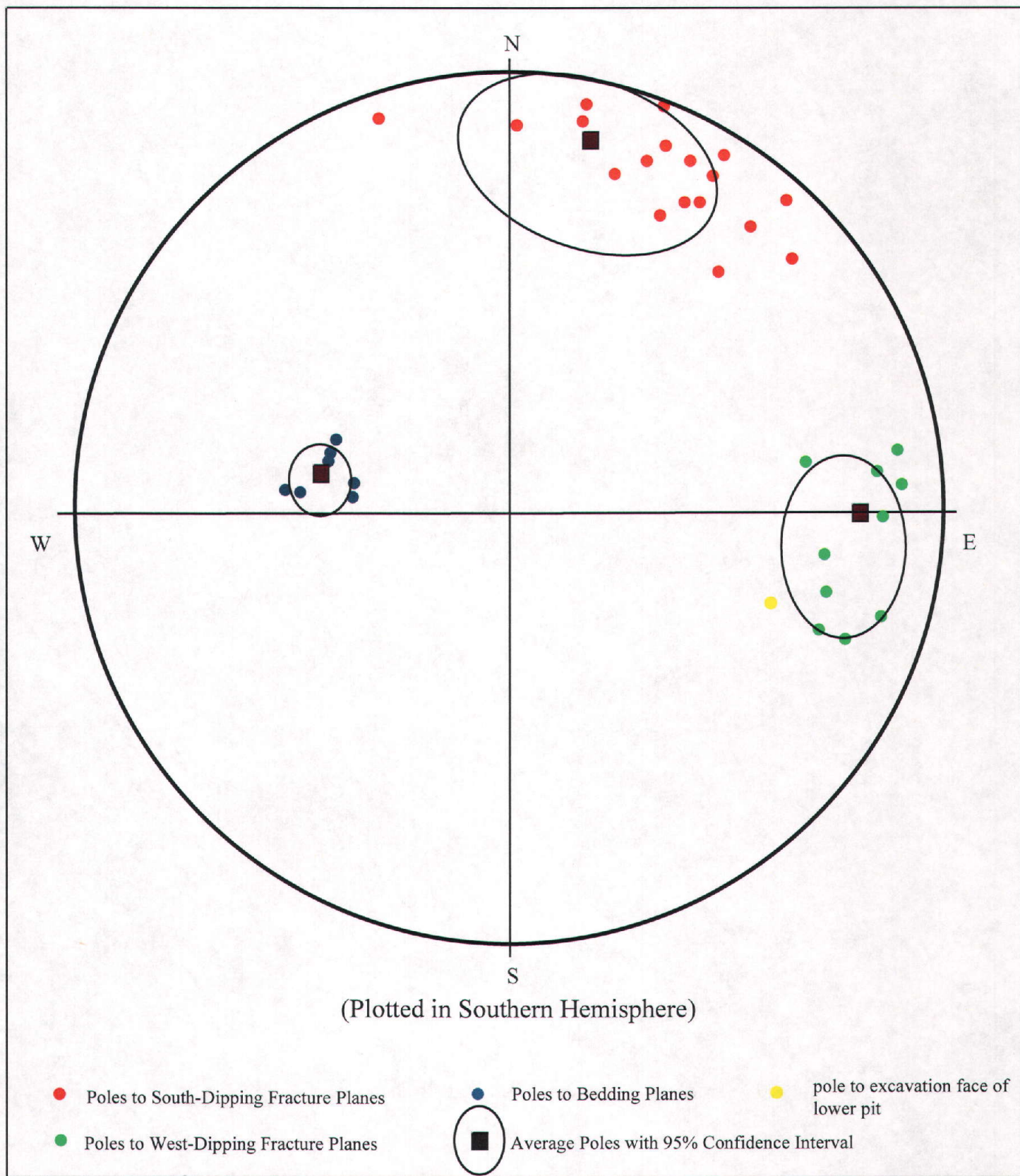
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**Plate
B-16**



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Stereonet

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**Plate
B-17**